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10/823,709

04/14/2004

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EXAMINER

JOHNSON, MATTHEW A

ART UNIT

PAPER NUMBER

3682

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06/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/823,709 | Applicant(s) TSURUTA ET AL. | |
| | Examiner Matthew Johnson | Art Unit 3682 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>5/1/2006, 11/8/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species I - Figures 1-3, 6, and 18, with claims 1-5 and 7-20 readable thereon, in the reply filed on 5/4/2007 is acknowledged.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the support member contacting the inertia member (claims 11 and 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. (Note: Elected Figs. 1-3, 6 and 18, do not appear to show the inertia member (14) in contact with the support member (37))

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 2 is objected to because of the following informalities: Claim 2 recites the limitation, "with a inner circumferential surface". In order for the claim to be grammatically correct the phrase should read, "with --an-- inner circumferential surface". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10 and 11, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 11 recite the limitation "said inertia member" in line 2. There is insufficient antecedent basis for this limitation in the claim. (Note: claims 10 and 11 depend from claim 8 which does not positively recite an inertia member)

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (USPGpub-20020019262).

Re clms 1-3: Suzuki discloses a flywheel assembly (1) comprising a(n):

- Flywheel (10) formed with an inner circumferential surface (near 25, Fig. 5)
- Damper mechanism (20)
- Crankshaft (2)
- Support member (25, See Fig. 5 and [0027]) having a cylindrical support portion (near 2b) formed with an outer circumferential surface opposing said inner circumferential surface in the radial direction

Re clms 4 and 5: Suzuki discloses a radial bearing (2b) composed of a cylindrical member disposed between said outer circumferential surface of said support member and said inner circumferential surface of said flywheel (Fig.5).

8. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackel et al. (USPGpub-20010004956).

Re clms 1-3: Jackel discloses a flywheel assembly (1) comprising a(n):

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- Flywheel (2,3) formed with an inner circumferential surface (near 4, Fig.2)
- Damper mechanism (8)
- Crankshaft ([0081] lines 8-10)
- Support member (17) having a cylindrical support portion (15, Fig.2) formed with an outer circumferential surface opposing said inner circumferential surface in the radial direction

Re clms 4 and 5: Jackel discloses a radial bearing (6, [0031], [0082]) composed of a cylindrical member disposed between said outer circumferential surface of said support member and said inner circumferential surface of said flywheel (Fig. 2, [0088]).

Re clms 7, 8, 12, and 13: Jackel discloses the support member (15) having a fix portion (18) to be fixed to a tip of said crankshaft. Jackel further discloses the fix portion (18) is an annular flat disc-like portion and said support portion extends in the axial direction from and edge of said fix portion (Fig. 2).

Re clm 17: Jackel discloses the damper mechanism (8) includes an input member (20) attached to said crankshaft, the input member being independent of and separate from said support member ([0083], [0091]).

Re clm 18: Jackel discloses a fix member (19) to fix said support member and said input member to said crankshaft.

Re clm 20: Jackel discloses that the crankshaft (dashed line, Fig. 2) has an annular protrusion (flange opposite 18) having an outer circumferential surface (surface contacting 18), which supports an inner circumferential surface (surface contacting crankshaft) of the support member (17).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9-11, 14-16, and 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackel et al. (USPGpub-20010004956).

Re clms 9 and 14: Jackel discloses all of the claim limitations as described above.

Jackel does not disclose (embodiment of Figs. 1 and 2) an inertia member separately formed from the support member

Jackel teaches (see Fig. 3, [0049]) a flywheel assembly (101) comprising an inertia member (162) separately formed from the support member (115) for the purpose of increasing the inertia of the flywheel ([0126]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an inertia member separately formed from the support member, as taught by Jackel, for the purpose of increasing the inertia of the flywheel ([0126]).

Re clms 10 and 15: Jackel does not disclose (embodiment of Figs. 1 and 2) a fix member that fixes said support member and said inertia member to said crankshaft.

Jackel teaches (Fig. 3) a fix member (19) that fixes the support member (117) and the inertia member (162) to the crankshaft (Note: part 162 may be formed as one piece with 160; See [0049] and [0123]) for the purpose of connecting the support member and flywheel to the crankshaft [0123].

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have employed a fix member that fixes the support member and the inertia member to the crankshaft, as taught by Jackel, for the purpose of connecting the support member and flywheel to the crankshaft [0123].

Re clms 11 and 16: Jackel does not disclose (embodiment of Figs. 1 and 2) that the support member contacts the inertia member.

Jackel teaches (Fig. 3) that the support member (117) contacts the inertia member (162 formed as one piece with 102, [0049]) for the purpose of centering the inertia member and flywheel ([0116]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have employed a support member that contacts the inertia member, as taught by Jackel, for the purpose of centering the inertia member and flywheel ([0116]).

Re clm 19: Jackel does not disclose (embodiment of Figs. 1 and 2) that the support member contacts the input member.

Jackel teaches (Fig. 12) that the support member (904) contacts the input member (922,922a) for the purpose of enhancing the stability of the apparatus ([0186]).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have employed a support member that contacts the input member, as taught by Jackel, for the purpose of enhancing the stability of the apparatus ([0186]).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Johnson whose telephone number is 571-272-7944. The examiner can normally be reached on Monday - Friday 8:30a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJ 6/7/2007



RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER